

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
Washington 25, D. C.

RADIO PROGRAM OUTLINE

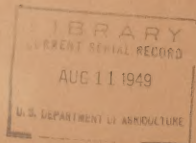
NO. 8

MUSIC: (THEME SONG -- ABOUT 30 SECONDS.)

ANNCR: Good morning, friends. This is (NAME) speaking for the
(NAME) Electric Cooperative of (TOWN). I hope you're
well and happy today.....I feel just fine myself. By the
way, did you ever notice how those two words, well and
happy, go together? I suppose a person can be happy and
not well, though it would be difficult. And, of course,
you can be well and not happy -- lots of folks are in that
state!

I'm thinking of the way things went at my neighbor's the
other day -- it's a sad story, believe me. The trouble
started in a small way -- a little difficulty with one of
the electric appliances -- then everything went wrong, all
at one time. I'll tell you about it in a few minutes --
and I'll introduce our guest for today at the same time.
First, though, we're going to have some cheerful music --
that wonderful song from "Oklahoma".... "Oh, What a
Beautiful Morning!"

MUSIC: (OH WHAT A BEAUTIFUL MORNING. . . 3 to 3½ MINUTES)





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ANNCR: That's a fine beginning for any day, seems to me. It should put us in a good mood to consider a very important subject. We have just the right man here to give us some helpful advice too... It's (NAME), electrification advisor of (NAME) co-op. He's right across the table from me now, all set to answer questions. How about it, (NAME)?

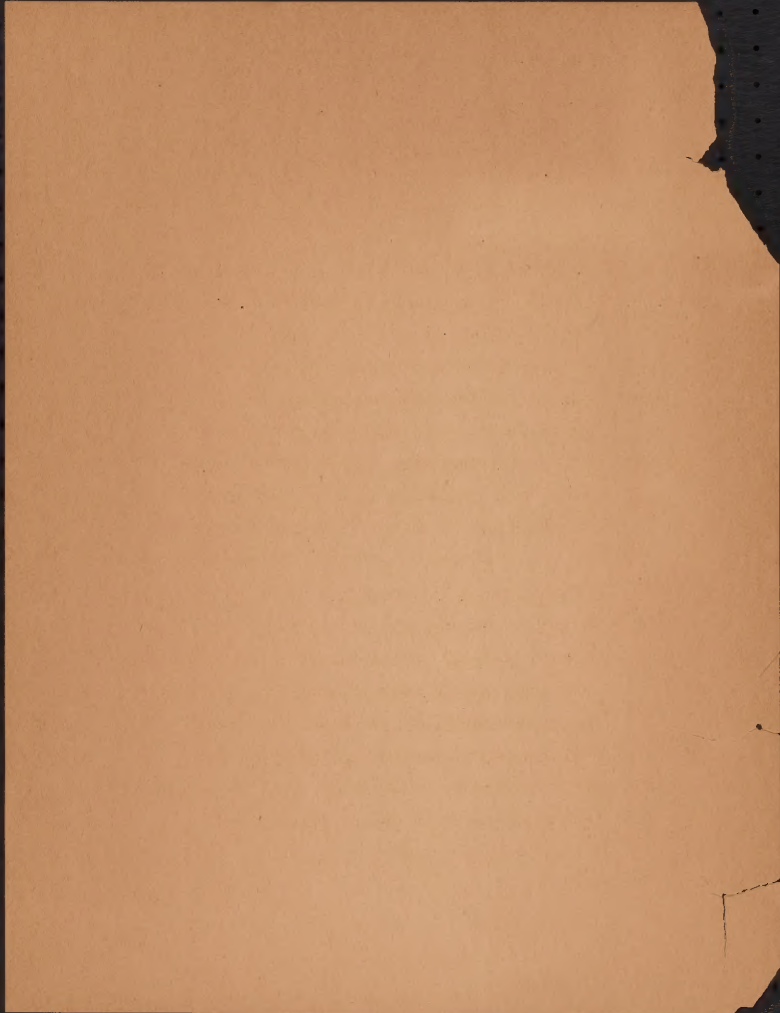
ADVISOR: Well, (NAME), if I don't have all the answers, I'll sure try to get them for you. I'd like to ask the first question myself, though. What's that sad story you mentioned? You said something about your neighbor having trouble with electric appliances -- what happened anyway?

ANNCR: (TELL STORY OF SOME RECENT TROUBLE ON CO-OP SYSTEM, CAUSED BY PLUGGING APPLIANCE INTO LIGHT SOCKET AND/OR OVERLOADING CIRCUIT. THIS PROBLEM ALSO COULD BE BUILT AROUND WIRING OR RE-WIRING A HOUSE. THE INCIDENT MIGHT RUN 2 TO 3 MINUTES IN LENGTH.)

ADVISOR: Your story brings up several points I think we should discuss right here, (NAME). First, I wish you and I could use words strong enough to convince everybody listening today that it never is advisable to plug any heating appliance or heavy motor into a socket. The average socket for fixtures simply won't carry the amount of electric current that such appliances need.

ANNCR: How many watts does an electric iron use, for example?

ADVISOR: 600 to a thousand. In contrast to that, a light bulb uses, say 60, 75, or 100 watts. A fixture wire,



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ADVISOR: naturally, isn't built to carry any such load. It's too small to furnish the amount of power that's required for this kind of appliance.

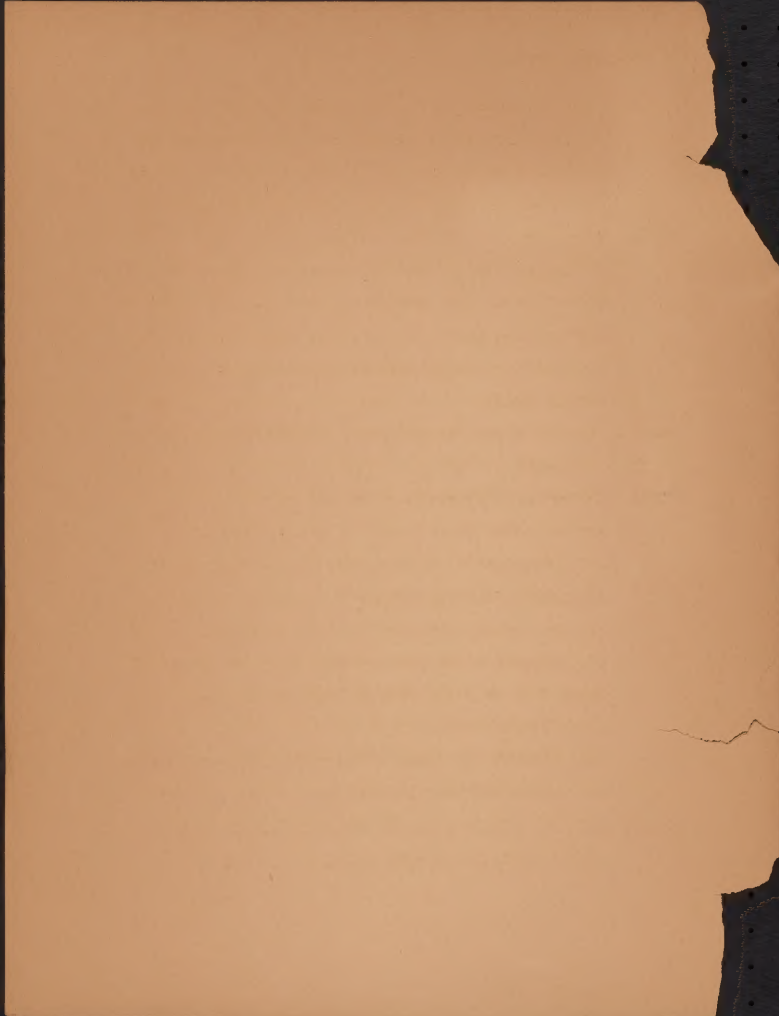
ANNCR: It's like trying to get a big stream of water through a small pipe.

ADVISOR: You've got the idea, (NAME). And I've been into homes where they've had a double or triple socket on an ordinary flexible extension cord, with two or three appliances attached. No wonder things don't work right!

ANNCR: Well, even when the individual outlets aren't over-loaded, you can put too much load on the circuits, can't you?

ADVISOR: Yes, indeed -- that often happens. In fact, it's the most common cause for blowing a fuse. A good many people never stop to think how much power the various appliances require. A 6-cup coffee percolator, for example, takes 750 watts -- a waffle iron, 800 or more -- a toaster and a hand iron each take from 600 to a thousand watts. Then, when you get to the larger appliances -- an electric range, for example -- 10,000 watts are often needed. A water heater takes about 3,500, and so on. These take special circuits, and they cannot work on ordinary circuits.

ANNCR: As I understand it, each circuit is put in for a certain definite loan -- and if too much demand is made on it, there's bound to be trouble.



ADVISOR: You're right about that.

ANNCR: Maybe it would be a good idea for you to explain just what an electric circuit is. I don't believe everybody is clear about that.

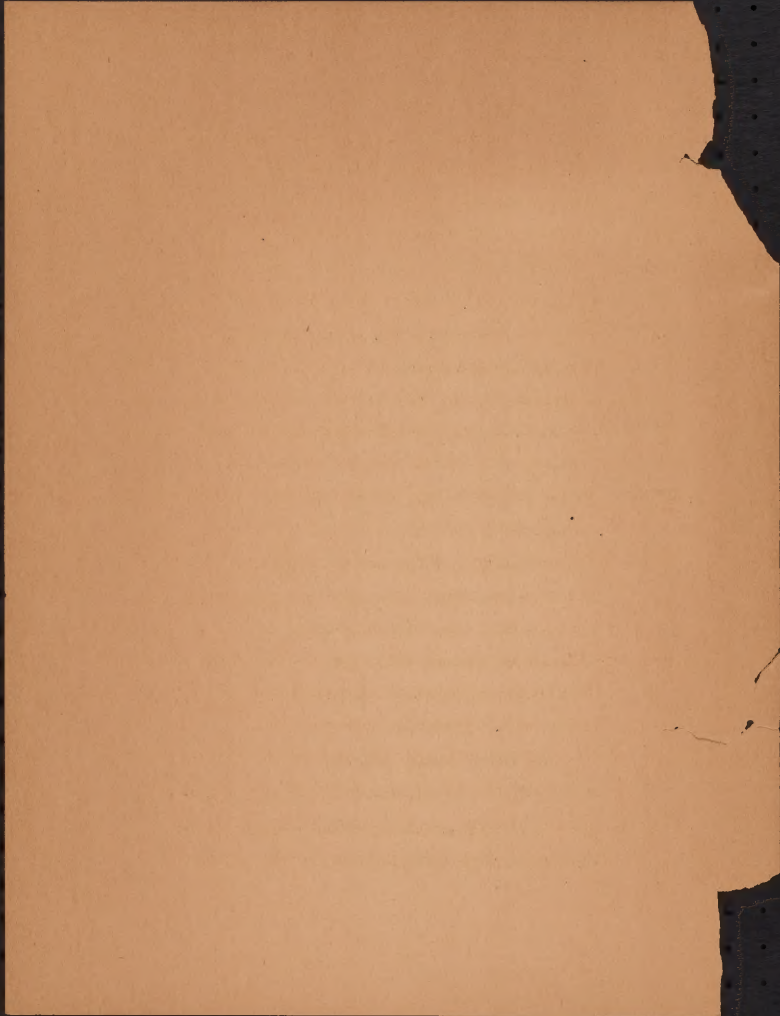
ADVISOR: Well, it's something every householder should know. What the electricians call a circuit is actually the complete path of an electric current. It's the way electric power travels around a farm, along insulated wires. Each house has a number of circuits, and each circuit includes several lights and wall plugs.

ANNCR: Is there an easy way of figuring how many circuits you have in a house?

ADVISOR: You have as many circuits as you have fuses, or circuit breakers. Now, if any circuit is asked to carry more electricity than it can safely, the power will go off automatically. This means the fuse or the circuit breaker has gone into action, to protect the wiring equipment. I'm sure everybody has seen a fuse that's melted and blown. If it didn't do that, the wires would get hot, and quite possibly cause a fire.

ANNCR: We've mentioned the danger of overloading a circuit, (NAME), but I don't think we've yet told just what is a safe load.

ADVISOR: Well, the ordinary household circuit receives 115 volts of electricity, and it contains a fuse that will blow, or a



circuit breaker that will trip, if it is asked to carry more than 15 amperes of current. In such a circuit, the limit of wattage you should ask it to carry is 15 amperes times 115 volts -- or 1725 watts -- that's what your house wiring has available.

ANNCR: Let's see, now -- to get the wattage, you multiply the 115 volts times the 15 amperes. That gives a total of 1725 watts the circuit will carry. Well, then, all you need to do is add up the wattage of the appliances you plan to use on the circuit, and you'll know how many make a safe load.

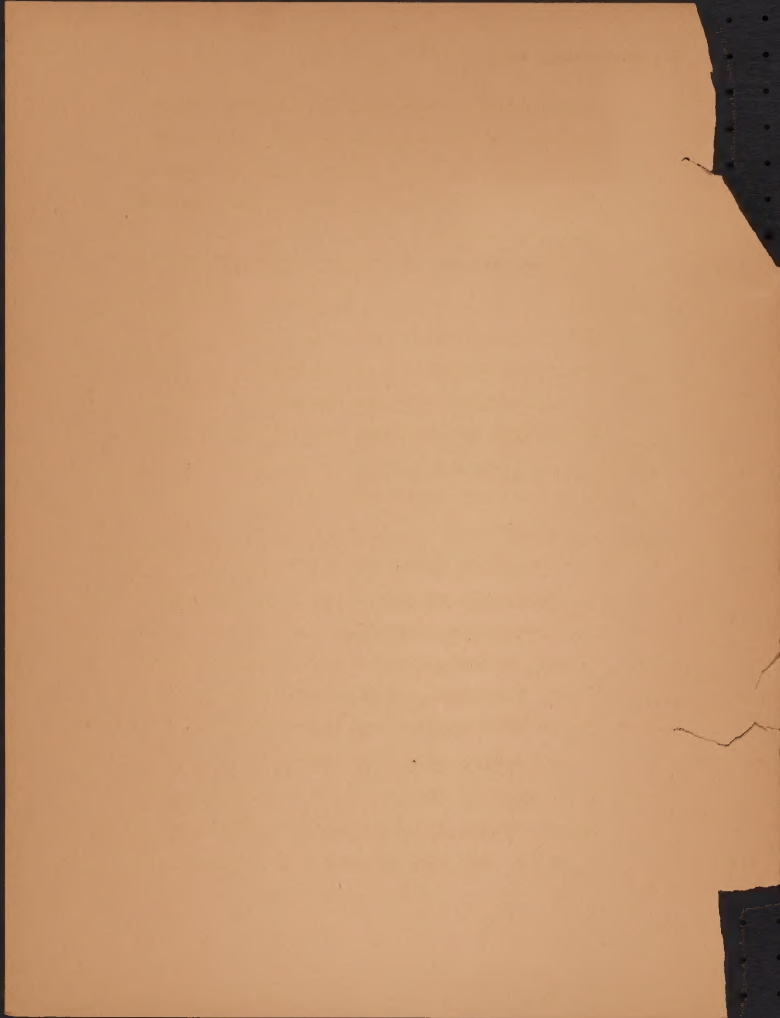
ADVISOR: That's right. And if the fuse blows and the power goes off in that circuit, you'll know you've got an overload.

ANNCR: The fuse and the circuit breaker really act as safety valves, don't they?

ADVISOR: They certainly do, (NAME), and the first thing to do if a fuse blows is find the cause of the trouble, and remove it, if possible, then replace the fuse.

ANNCR: I suppose the simplest thing to do is to check the appliances on that circuit. If you suspect there are too many, then you should disconnect some of them before you turn the power back on again. Am I right?

ADVISOR: Right! And if the same fuse or circuit breaker goes out again immediately -- call an electrician. The trouble may be serious. Right here let's mention that everybody should



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ADVISOR: have a supply of the right-sized fuses on hand all the time. And don't substitute 30's for 15's.

ANNCR: Yes, it's important to use the right-sized fuse. You're asking for trouble if you don't. I learned that the hard way! By the way, (NAME), we're assuming everybody knows just where the various circuits are located around the house.

ADVISOR: Well, it's something everybody should know. Your electrician will tell you what outlets are on what circuits. Or you can find out for yourself, by unscrewing each fuse separately. Then note which lamps and appliances stop operating.

ANNCR: Here's another question, (NAME), -- some electrical appliances aren't marked with the wattage. Is there any way of figuring this?

ADVISOR: Yes, indeed. If the wattage isn't marked on an appliance, you'll always find the volt and ampere ratings. All you have to do is multiply the volts times the amperes -- that will give you the wattage. For example, an electric fan marked 120 volts and 3 amperes would be rated 360 watts.

ANNCR: I see -- 3 times 120 equals 360. That's easy. As I think back over our discussion today, (NAME), it seems to me that the best advice we can give our listeners is to get acquainted with their house wiring. It certainly will save a lot of trouble to know where the circuits are -- how to avoid overloading them -- the wattage of various electrical



ANNCR: appliances, and so forth.

ADVISOR: You're right about that, (NAME). And the folks who are just getting electricity certainly ought to talk their wiring plans over with the contractor. If they get his help in planning the wiring system, it will save a lot of trouble. Let them tell him what equipment they intend to buy in the future, as well as what they have on hand. Then he'll know what provisions to make.

ANNCR: I'm sure that many families getting electricity for the first time don't realize all it will do for them. That's why they don't plan far enough ahead.

ADVISOR: Well, it's a good idea to talk with people who can tell them about the ways that electric power will help with both the farm duties and the housework. The county agent and the home demonstration agent, for example -- both are ready to give advice and assistance in making wiring plans. I'm sure the members of (NAME) Co-op know they can call on me for help.

ANNCR: Now, (NAME), let's wind things up with a few general suggestions to our listeners about planning and installing wiring.

ADVISOR: All right. First, make a wiring plan -- and be sure there are several heavy-duty outlets included, to take care of large appliances that the family may buy later.



ADVISOR: It costs less to have this wiring installed in the beginning.

ANNCR: And a lot more convenient too.

ADVISOR: You're right about that. Next, I urge everyone to have a reputable wiring contractor do the work. And be sure the installation is made according to the National Electrical Code and local regulations. Last, have the wiring inspected by an accredited electrical inspector. He will furnish a signed inspection certificate.

(FOLLOWING IS OPTIONAL: SUGGEST USING IT IF DESIRABLE TO ENCOURAGE SECTION 5 LOANS IN SPECIFIC AREA)

And let me take just a moment more to remind the members of (NAME) co-op that it's possible for them to borrow money from the co-op on convenient terms, to finance home and farm wiring. We'll be glad to discuss this matter with our members at any time.

ANNCR: That's all good advice, (NAME), and I know you'll be ready to give personal attention to anybody who gets in touch with you at the co-op office. (GIVE LOCATION).

Now, let's look at the market report for today.....

(GIVE MARKET REPORT.)

And last, here's today's news about the weather....

(GIVE WEATHER REPORT.)

MUSIC: (FADE IN THEME MUSIC AND KEEP UNDER CLOSING.)



ANNCR: We're going to follow up this advice on wiring with a number of safety suggestions -- do's and don'ts on using electricity. (ANOTHER GOOD FOLLOW-UP SUBJECT IS CHOICE AND CARE OF ELECTRICAL APPLIANCES.)

Hope you'll be listening for this on (DATE) at (TIME). This is (NAME) speaking for (NAME) Electric Cooperative of (TOWN).

MUSIC UP TO CLOSE.

